There are two species of tuatara, the common tuatara (*Sphenodon punctatus*) with a population of about 100,000 and the Brothers Islands tuatara (*Sphenodon guntheri*) with only about 300 individuals.

Other populations of tuatara can be found on islands off Whangarei, in the Hauraki Gulf, off the Coromandel coast, and in the Bay of Plenty.

Young tuatara climb well and are often found in trees although the adults live mainly on the ground.

The first tuatara to be publicly exhibited was on show at London Zoo in 1870, but it was not until a century later that they were first bred outside of New Zealand.

Tuataras do not reproduce until they are 12-15 years old, and even then, they reproduce only once every four years!

Sphenodon was the first reptile in the world to be protected by law (since 1895).

Tuatara share ancestry with birds – both are *diapsids*, the main characteristic of which is two openings on each side of the skull. Birds have these openings since they too are descended from dinosaurs.

Orana Wildlife Park
P.O. Box 5130
Papanui
Christchurch
New Zealand

Telephone: (03) 359 7109
Fax: (03) 359 4330
Email: school@oranawildlifepark.co.nz

www.oranawildlifepark.co.nz

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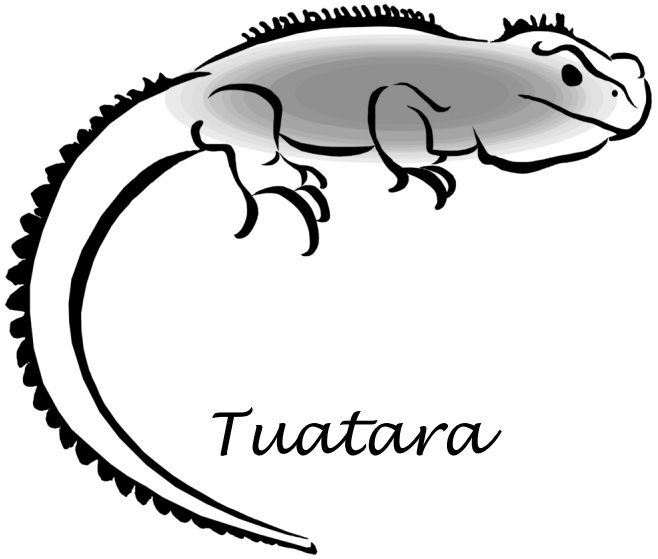

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The reptile group that tuatara belong to, the *Sphenodontia*, has been on Earth for 225 million years.

The Maori name tuatara means ‘peaks on the back’. The scientific name *Sphenodon* means ‘wedge-shaped tooth’.

Tuatara have a ‘third eye’ on top of the head under the scales. It has the remains of a lens and retina but no iris so cannot form images. Several other reptiles also have parietal eyes, and some invertebrates even have fully functioning ones!

Before the arrival of Europeans, tuatara were used as a food source by the Maori.

There are at least 30,000 tuatara on Cook Strait’s Stephen’s Island which, at 150 hectares, is only about the size of Hagley Park in Christchurch.

A tuatara’s preferred body temperature is between 60 and 70 degrees, the lowest optimal body temperature of all reptiles, but the tuatara thrives and it even suffers at higher temperatures!

Tuatara keep growing until they are about 35 years old

Male tuatara are bigger than females, and can weigh up to twice as much.

Although they look like them, tuatara are not lizards — lizards have visible ear openings but tuatara do not.

Tuatara are predators, feeding on insects and other invertebrates, frogs, lizards, the eggs and chicks of seabirds — and baby tuatara!

The process of egg formation takes a female 8 to 9 months. Then the eggs take 12 months to hatch which is longer than almost any other reptile.

Like lizards, tuatara can shed and regrow their tails. Sometimes when a tail is not fully shed a new tail still grows, resulting in a forked or double tail.

Adult tuatara are largely active at night but their young are mainly active in the daytime — perhaps to avoid being eaten by the adults!

Tuatara have a very slow metabolism. At times their heart-rate can be as low as one beat per minute.

The sex of baby tuatara is determined by the temperature the eggs are incubated at. At 20^{o}C the babies are mostly female, at 22^{o}C mostly male, and at 21^{o}C a random mixture of both.

Adult tuatara are capable of holding their breath for nearly an hour!

Tuatara also mate differently from lizards. The male tuatara does not have a penis; he mounts the female and passes sperm straight from his cloaca to hers (the cloaca is a body opening).

The ancestors of tuatara are known to have been in New Zealand at least 80 million years ago when New Zealand split away from Gondwanaland. However, the oldest fossils found so far are only about 15 million years old.

Tuatara don’t have real teeth with roots, but just serrated extensions of the jaw bones. The upper sets of teeth are in double rows.

A promotional pamphlet advertising the release of tuatara stamps in 1991 mistakenly featured photos of South American iguanas!

Baby tuatara are already about 10cm long on hatching.

Tuatara can live to be over 100 years old and there is currently one in captivity that is estimated to be about 150 years old.

Tuatara use their ‘egg tooth’, a spike on the end of their snout, to break out of their egg. The ‘egg tooth’ will fall off during the first three weeks of life.

Tuatara are commonly found sharing burrows dug by seabirds such as petrels, prions and shearwaters. The birds' droppings help fertilise the soil in the burrow, making ideal conditions for the invertebrates fed on by the tuatara - weta, beetles, spiders and earthworms. Unfortunately for the seabirds, their eggs and chicks can also become food!